

# 1 Interview Summaries

## 1.1 *Maine Department of Inland Fisheries and Wildlife*

Interview Type	State Agency
Interview Location	Bangor, Maine
Interview Date	November 7, 2001
Summary Date	November 28, 2001
Interviewer	Thomas Burns <a href="mailto:agismap1@maine.rr.com">agismap1@maine.rr.com</a>
Interviewed:	Rich Dressler, Habitat Team Leader George Matula, Supervisor, Wildlife Resource Assessment Section John Kenney, Wildlife Biologist Garrett Schairer, Wildlife Biologist

### 1.1.1 Agency Overview

The interviewees represented the Wildlife Division within the Bureau of Resource Management. Other divisions of IF&W such as the Warden Service, the Fisheries Division and Planning were not represented. IF&W's GIS program began within the Wildlife Division in 1991 when it was given the responsibility to represent IF&W in an Oil Spill Preparedness program with other state agencies. At that time, they got a workstation and a dedicated staff position. Since then, there has been a continuing commitment to GIS. IF&W began as the Maine Fisheries Commission in 1880.

### 1.1.2 GIS Initiatives

IF&W has struggled over the years to find a way to respond to data requests from the public. Recently, they developed a cooperative agreement between several state agencies and land trusts that allows distribution of the 'Landscape Analysis' data set. This data set brings together a variety of data developed and maintained by state agencies:

- Riparian Zones
- Habitat Data from the Natural Areas Program (Maine Geologic Survey) and IF&W
- Large Habitat Blocks ranked by habitat value

Outreach efforts are underway to educate large landowners, land trusts and a few pilot municipalities in the use of the Landscape Analysis dataset. Hard copy editions are available to the IF&W Regional Biologists to promote understanding of "essential habitats" as part of the core IF&W data sets.

#### 1.1.2.1 Overview of GIS Utilization

There are two staff dedicated to GIS activities although their titles are simply listed as 'Wildlife Biologists.' Several additional staff are ArcView literate and understand all of the basic GIS data sets available to them. The two 'GIS' staff maintain two applications written in Avenue. The two applications have facilitated the use of data by other IF&W staff that would not normally take the time or have the interest to learn ArcView. Two

Regional Offices, Strong and Enfield, increasingly are finding ways to use ArcView to perform their jobs.

The GIS is used primarily for four purposes:

- To distribute data already developed;
- To place projects in a geographical context;
- To make maps to facilitate analysis; and
- To aid in project reviews that require permits.

#### **1.1.2.2 GIS Operating Environment and Infrastructure**

The IF&W offices in Bangor are on a network supported by a Dell Power Edge 6400 server. The Dell Server is a 770 Mhz machine with 2 gig of RAM running Windows 2000 Server.

IF&W owns a copy of ArcGIS 8.1 (ArcInfo edition) and four copies of ArcView 8.1. In addition, they have continued to use their four copies of ArcView 3.x. The seven regional offices all have ArcView 3.1. The regional offices reach the Dell Server through Terminal Services to access IF&W applications.

#### **1.1.2.3 GIS Data Resources and Requirements**

##### **1.1.2.3.1 Spatial Data**

##### **Basemap features:**

Complete MeGIS basemap datasets are available to IF&W staff and are used regularly.

##### **Analysis layers, including:**

- Coastal Wildlife Concentration Areas (CWCA)
- Coastal Wading Bird Habitats
- Eelgrass beds (DMR)
- Landcover classified by high, medium and low value habitat

##### **Currently unavailable but desired data sets include:**

The biggest data need for IF&W is statewide, **updated landcover**. The current landcover is based on 1991 imagery. It took many years to develop and was expensive to finalize.

Another data set they seek to integrate with their GIS program is the **Biological Conservation Database** (BCD). The BCD, begun in the early 1970's by The Nature Conservancy, was a non-georeferenced Access database. The Maine Natural Areas Program is responsible for keeping the database current with respect to plants and natural communities while IF&W is responsible for the animals. Together, they are trying to follow developments as TNC and other states move the BCD to Oracle Spatial.

Finally, they would look forward to the day when a **statewide parcel** layer could be developed.

#### 1.1.2.4 GIS Applications and Application Requirements

There are currently two applications running at IF&W. A contractor initially designed and created the applications. In-house staff has since maintained them. They are:

1. **The Habitat Consultation Area Mapping Project (HCAMP):** The HCAMP application identifies known locations of all natural features and wildlife habitats. Locations of these habitats are indicated on the maps by grid cells (roughly 154 acres). Grid cells are "turned on" by:
  - Locations of endangered, threatened, and special concern plants and animals;
  - Essential habitats for state endangered and threatened animals;
  - Deer wintering areas;
  - Waterfowl and wading bird habitats;
  - Shorebird feeding and roosting areas;
  - Seabird nesting islands; and
  - Rare or exemplary natural communities.
- 2: **The Wildlife Management Area Application:** This is primarily an ArcView Project (.APR) but with some degree of customization. It allows the casual viewer to investigate data associated with one of the seven regional Wildlife Management areas.

#### Planned future GIS activity and applications:

There is firm resolve within the Wildlife Division to maintain current operations. Efforts to expand the use of GIS within IF&W have proved more problematic.

#### 1.1.3 Major Benefits and Cost Justification

The group made a strong case for major benefits from their GIS program:

- **Expedited Project Review.** Review time is now measured in days as opposed to weeks and months.
- **New Capabilities:** Several initiatives such as the Landscape Analysis initiative would never even have been attempted. This would be a case where customer service hasn't just improved; they have been able to provide new services to the public.
- **Improved Quality:** The quality of their analysis and recommendations has measurably improved. Staff is far more confident in their public recommendations.
- **Ability to Quantify Results:** Staff feels more confident knowing they can quantify and defend their public positions.

Meanwhile, the cost has, in fact, been modest. Through Oil Spill Funding, USGS collaboration, through their Service-Level-Agreement with MeGIS and with an ability to

have dedicated staff who has developed their skills on-the-job, IF&W has achieved a credible GIS capability quite cost effectively.